



For Release: Wednesday, April 25, 2018

18-481-DAL

SOUTHWEST INFORMATION OFFICE: Dallas, Texas

Technical information: (972) 850-4800 BLSInfoDallas@bls.gov www.bls.gov/regions/southwest

Media contact: (972) 850-4800

Occupational Employment and Wages in Houston-The Woodlands-Sugar Land – May 2017

Workers in the Houston-The Woodlands-Sugar Land Metropolitan Statistical Area had an average (mean) hourly wage of \$25.87 in May 2017, about 6 percent above the nationwide average of \$24.34, according to the U.S. Bureau of Labor Statistics. Assistant Commissioner for Regional Operations Stanley W. Suchman noted that, after testing for statistical significance, wages in the local area were higher than their respective national averages in 10 of the 22 major occupational groups, including architecture and engineering; legal; and management. Four groups had significantly lower wages than their respective national averages, including building and grounds cleaning and maintenance, as well as construction and extraction.

When compared to the nationwide distribution, local employment was more highly concentrated in 6 of the 22 occupational groups, including construction and extraction; architecture and engineering; and office and administrative support. Conversely, 10 groups had employment shares significantly below their national representation, including personal care and service; management; and community and social service. (See [table A](#) and [box note](#) at end of release.)

Table A. Occupational employment and wages by major occupational group, United States and the Houston-The Woodlands-Sugar Land Metropolitan Statistical Area, and measures of statistical significance, May 2017

Major occupational group	Percent of total employment		Mean hourly wage		Percent difference ⁽¹⁾
	United States	Houston	United States	Houston	
Total, all occupations	100.0	100.0	\$24.34	\$25.87*	6
Management	5.1	4.3*	57.65	67.22*	17
Business and financial operations	5.2	5.2	36.70	41.32*	13
Computer and mathematical	3.0	2.8*	43.18	45.29*	5
Architecture and engineering	1.8	2.8*	41.44	53.92*	30
Life, physical, and social science	0.8	1.0*	35.76	40.26*	13
Community and social service	1.5	0.8*	23.10	25.06*	8
Legal	0.8	0.8	51.62	61.24*	19
Education, training, and library	6.1	6.1	26.67	27.65	4
Arts, design, entertainment, sports, and media	1.4	1.1*	28.34	27.83	-2
Healthcare practitioners and technical	6.0	5.4*	38.83	38.75	0
Healthcare support	2.9	2.3*	15.05	14.33*	-5
Protective service	2.4	2.4	22.69	21.58	-5
Food preparation and serving related	9.3	9.5*	11.88	11.75	-1
Building and grounds cleaning and maintenance	3.1	2.8*	13.91	12.06*	-13
Personal care and service	3.6	2.7*	13.11	11.86*	-10
Sales and related	10.2	10.4	19.56	21.18*	8
Office and administrative support	15.4	15.9*	18.24	18.78*	3
Farming, fishing, and forestry	0.3	0.1*	13.87	13.32	-4

Note: See footnotes at end of table.

Table A. Occupational employment and wages by major occupational group, United States and the Houston-The Woodlands-Sugar Land Metropolitan Statistical Area, and measures of statistical significance, May 2017 - Continued

Major occupational group	Percent of total employment		Mean hourly wage		
	United States	Houston	United States	Houston	Percent difference ⁽¹⁾
Construction and extraction.....	4.0	6.1*	24.01	22.72*	-5
Installation, maintenance, and repair	3.9	4.3*	23.02	23.40	2
Production	6.3	6.0*	18.30	20.96*	15
Transportation and material moving	7.0	7.2	17.82	19.78	11

Footnotes:

(1) A positive percent difference measures how much the mean wage in the Houston-The Woodlands-Sugar Land Metropolitan Statistical Area is above the national mean wage, while a negative difference reflects a lower wage.

* The percent share of employment or mean hourly wage for this area is significantly different from the national average of all areas at the 90-percent confidence level.

One occupational group—architecture and engineering—was chosen to illustrate the diversity of data available for any of the 22 major occupational categories. Houston-The Woodlands-Sugar Land had 83,080 jobs in architecture and engineering, accounting for 2.8 percent of local area employment, significantly higher than the 1.8-percent share nationally. The average hourly wage for this occupational group locally was \$53.92, significantly above the national wage of \$41.44.

Some of the larger detailed occupations within the architecture and engineering group included petroleum engineers (10,950), civil engineers (10,030), and mechanical engineers (7,530). Among the higher paying jobs were petroleum engineers and chemical engineers, with mean hourly wages of \$85.15 and \$72.73, respectively. At the lower end of the wage scale were surveying and mapping technicians (\$22.80) and architectural and civil drafters (\$27.08). (Detailed occupational data for architecture and engineering are presented in [table 1](#); for a complete listing of detailed occupations available go to www.bls.gov/oes/current/oes_26420.htm.)

Location quotients allow us to explore the occupational make-up of a metropolitan area by comparing the composition of jobs in an area relative to the national average. (See [table 1](#).) For example, a location quotient of 2.0 indicates that an occupation accounts for twice the share of employment in the area than it does nationally. In the Houston-The Woodlands-Sugar Land Metropolitan Statistical Area, above-average concentrations of employment were found in many of the occupations within the architecture and engineering group. For instance, petroleum engineers were employed at 16.7 times the national rate in Houston, and chemical engineers, at 7.5 times the U.S. average. Both location quotients in Houston were among the highest in all metropolitan areas for these particular occupations. On the other hand, electrical engineers had a location quotient of 1.0 in Houston, indicating that this particular occupation's local and national employment shares were similar.

These statistics are from the Occupational Employment Statistics (OES) survey, a federal-state cooperative program between BLS and State Workforce Agencies, in this case, the Texas Workforce Commission.

Notes on Occupational Employment Statistics Data

With the release of the May 2017 estimates, the OES program has replaced 21 detailed occupations found in the 2010 Standard Occupational Classification (SOC) with 10 new aggregations of those occupations. In addition, selected 4- and 5-digit North American Industry Classification System (NAICS) industries previously published by OES will no longer be published separately. Some of the 4-digit NAICS industries that are no longer being published separately will instead be published as OES-specific industry aggregations. More information about the new occupational and industry aggregations is available at www.bls.gov/oes/changes_2017.htm.

A value that is statistically different from another does not necessarily mean that the difference has economic or practical significance. Statistical significance is concerned with the ability to make confident statements about a universe based on a sample. It is entirely possible that a large difference between two values is not significantly different statistically, while a small difference is, since both the size and heterogeneity of the sample affect the relative error of the data being tested.

Technical Note

The Occupational Employment Statistics (OES) survey is a semiannual survey measuring occupational employment and wage rates for wage and salary workers in nonfarm establishments in the United States. The OES data available from BLS include cross-industry occupational employment and wage estimates for the nation; over 650 areas, including states and the District of Columbia, metropolitan statistical areas (MSAs), metropolitan divisions, nonmetropolitan areas, and territories; national industry-specific estimates at the NAICS sector, 3-, 4-, and selected 5- and 6-digit industry levels, and national estimates by ownership across all industries and for schools and hospitals. OES data are available at www.bls.gov/oes/tables.htm.

OES estimates are constructed from a sample of about 1.2 million establishments. Each year, two semiannual panels of approximately 200,000 sampled establishments are contacted, one panel in May and the other in November. Responses are obtained by mail, Internet or other electronic means, email, telephone, or personal visit. The May 2017 estimates are based on responses from six semiannual panels collected over a 3-year period: May 2017, November 2016, May 2016, November 2015, May 2015, and November 2014. The overall national response rate for the six panels, based on the 50 states and the District of Columbia, is 72 percent based on establishments and 68 percent based on weighted sampled employment. The unweighted sample employment of 82 million across all six semiannual panels represents approximately 58 percent of total national employment. The sample in the Houston-The Woodlands-Sugar Land Metropolitan Statistical Area included 10,132 establishments with a response rate of 43 percent. For more information about OES concepts and methodology, go to www.bls.gov/oes/current/oes_tec.htm.

The May 2017 OES estimates are based on the 2010 Standard Occupational Classification (SOC) system and the 2012 North American Industry Classification System (NAICS). Information about the 2010 SOC is available on the BLS website at www.bls.gov/soc and information about the 2012 NAICS is available at www.bls.gov/bls/naics.htm.

Metropolitan area definitions

The substate area data published in this release reflect the standards and definitions established by the U.S. Office of Management and Budget.

The **Houston-The Woodlands-Sugar Land Metropolitan Statistical Area** includes Austin, Brazoria, Chambers, Fort Bend, Gavelston, Harris, Liberty, Montgomery, and Waller Counties in Texas.

Additional information

OES data are available on our regional web page at www.bls.gov/regions/southwest. Answers to frequently asked questions about the OES data are available at www.bls.gov/oes/oes_ques.htm. Detailed technical information about the OES survey is available in our Survey Methods and Reliability Statement on the BLS website at www.bls.gov/oes/current/methods_statement.pdf.

Information in this release will be made available to sensory impaired individuals upon request . Voice phone: (202) 691-5200; Federal Relay Service: (800) 877-8339.

Table 1. Employment and wage data from the Occupational Employment Statistics survey, by occupation, Houston-The Woodlands-Sugar Land Metropolitan Statistical Area, May 2017

Occupation ⁽¹⁾	Employment		Mean wages	
	Level ⁽²⁾	Location quotient ⁽³⁾	Hourly	Annual ⁽⁴⁾
Architecture and engineering occupations	83,080	1.6	\$53.92	\$112,150
Architects, except landscape and naval	2,400	1.1	48.83	101,570
Landscape architects	(5)	(5)	42.30	87,990
Cartographers and photogrammetrists.....	460	2.0	33.98	70,690
Surveyors	1,300	1.5	32.03	66,630
Aerospace engineers	2,720	2.0	58.28	121,210
Biomedical engineers	300	0.7	40.76	84,780
Chemical engineers.....	5,170	7.5	72.73	151,290
Civil engineers.....	10,030	1.6	55.45	115,330
Computer hardware engineers.....	560	0.4	55.05	114,510
Electrical engineers.....	3,870	1.0	50.09	104,180
Electronics engineers, except computer	2,670	1.0	(5)	(5)
Environmental engineers.....	920	0.9	(5)	(5)
Health and safety engineers, except mining safety engineers and inspectors	1,540	2.9	53.42	111,110
Industrial engineers.....	4,820	0.9	60.00	124,800
Marine engineers and naval architects.....	520	2.3	43.04	89,520
Materials engineers.....	970	1.7	50.58	105,200
Mechanical engineers	7,530	1.3	54.56	113,480
Petroleum engineers	10,950	16.7	85.15	177,110
Engineers, all other	3,690	1.4	60.93	126,740
Architectural and civil drafters	3,420	1.7	27.08	56,320
Electrical and electronics drafters	760	1.4	33.53	69,740
Mechanical drafters.....	2,090	1.8	34.34	71,430
Drafters, all other.....	570	1.8	37.30	77,580
Aerospace engineering and operations technicians	390	1.6	34.72	72,220
Civil engineering technicians.....	2,690	1.8	30.70	63,860
Electrical and electronics engineering technicians.....	3,780	1.4	33.10	68,850
Electro-mechanical technicians.....	530	2.0	29.02	60,360
Environmental engineering technicians.....	310	0.9	36.92	76,780
Industrial engineering technicians	1,490	1.1	32.73	68,090
Mechanical engineering technicians	1,850	2.1	41.09	85,460
Engineering technicians, except drafters, all other	2,050	1.3	31.36	65,220
Surveying and mapping technicians.....	2,130	2.0	22.80	47,420

Footnotes:

(1) For a complete listing of all detailed occupations in Houston-The Woodlands-Sugar Land Metropolitan Statistical Area, see www.bls.gov/oes/current/oes_26420.htm.

(2) Estimates for detailed occupations do not sum to the totals because the totals include occupations not shown separately. Estimates do not include self-employed workers.

(3) The location quotient is the ratio of the area concentration of occupational employment to the national average concentration. A location quotient greater than one indicates the occupation has a higher share of employment than average, and a location quotient less than one indicates the occupation is less prevalent in the area than average.

(4) Annual wages have been calculated by multiplying the hourly mean wage by a "year-round, full-time" hours figure of 2,080 hours; for those occupations where there is not an hourly mean wage published, the annual wage has been directly calculated from the reported survey data.

(5) Estimate not released.